

BEFORE EXAMINER STOGNER
OIL CONSERVATION DIVISION

YATES EXHIBIT NO. 11 YATES PETROLEUM CORPORATION
CHRONOLOGICAL DRILLING REPORT
CASE NO. 8323 Flint "GU" #4
Unit J
22-18S-26E
Eddy County, New Mexico

2-22-85 Location: 1980' FSL and 1980' FEL of Section 22-18S-26E in Eddy County, New Mexico. Elevation: 3336' DF. PTD: 9263' Morrow. This well was originally drilled by Pan American as the Flint Gas Com #1, spudded 11-8-58 with TD 9263'. This well was plugged and abandoned 9-15-70. We propose to re-enter and stimulate the Morrow formation. Rigging up pulling unit.

2-23-85 GIH with 181 joints (9045.40') 2-3/8" J-55 tubing, Baker Lok-set packer (9050.50'), 1 - 4-1/2" x 1.81 "F" nipple in ON/OFF Baker tool. Swabbed perforations 9094-9114'. Fluid level 6000'. Made 8 swab runs, recovered 25 bbls. Fluid level staying at 8500', no oil or gas. Shut down. ETCTD \$945

2-24-25-85 Overnight SITP 0#. Fluid level 7500'. Made 20 swab runs, recovered 30 bbls. Had small amount of gas on 10 swab runs, no gas after swab run. Avg 1.5 bbls per run. Swabbing off seating nipple. No show oil. Fluid level staying 8500'. EDC \$1050; ETCTD \$1995 WATER ANALYSIS: 9094-9114' Morrow

	<u>2-23-85</u>	<u>2-23-85</u>
Sp. Gravity	1.04 @ 65°	@ 80°
pH	6.5	6.5
Iron	faint/strong	faint/strong
Hardness	18000	14000
Calcium	3200	2400
Magnesium	2430	1944
Sod & Pot	23329	23759
Resistivity	.22 @ 65°	.18 @ 80°
Sulfate	488	375
Bicarbonate	610	488
Chloride	48000	46000
Sod Chloride	78960	75670
Sodium	23329	23759
Potassium	0	0
	(load water)	(load water)

2-26-85 Overnight SITP 0# on slight vacuum. Fluid level 8000'. Small amount of gas on swab runs (will burn), no gas after swab run. Took water sample on 8th run. Made 20 swab runs, recovered 30 bbls. Fluid level staying 8500'. EDC \$1050; ETCTD \$3045 WATER ANALYSIS:

	<u>2-25-85</u>	<u>9094-9114 Morrow</u>
Sp. Gravity	1.03 @ 78°	1.035 @ 74°
pH	6.5	5.5
Iron	faint/good	faint/strong
Hardness	6300	8000
Calcium	920	2000
Magnesium	559	972
Sod & Pot	22427	19642
Sulfate	390	500
Bicarbonate	6100	488
Chloride	34000	36000
Sod Chloride	55930	59220
Sodium	22427	19642
KCL	0%	0%

2-27-85 Overnight SITP 0#. Well on slight vacuum. Fluid level 8000'. Small amount of gas on swab runs will burn. No gas after swab runs. Made 15 swab runs, recovered 39 bbls. Fluid level staying at 8500'. EDC \$1050; ETCTD \$4095 WATER ANALYSIS:

	<u>2-25-85</u>	<u>9094-9114' Morrow</u>
Sp. Gravity	1.050 @ 70°	Resistivity .25 @ 70°
pH	6	Sulfate 2500
Iron	faint/strong	Bicarbonate 732
Hardness	2500	Chloride 40000
Calcium	600	Sod Choride 65300
Magnesium	243	Sod & Pot 25192

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2-28-85 Overnight SITP 0#. Well on slight vacuum. Fluid level 8000'. Small amount of gas on swab run will burn. No gas after swab run. Made 26 swab runs, recovered 66 bbls. Fluid level staying at 8600'. EDC \$585; ETCTD \$4680
WATER ANALYSIS: 2-28-85 9094-9114' Morrow
Sp. Gravity 1.040 @ 74° Resistivity .18 @ 74°
pH 6.5 Sulfate 500
Iron faint/strong Bicarbonate 732
Hardness 17000 Chloride 34000
Calcium 2000 Sod Chloride 55930
Magnesium 2916 Sodium 8970
Sod & Pot 8970 KCL 0%

3-1-85 Overnight SITP 0#. Well on slight vacuum. Fluid level 8000'. Small amount of gas on swab run will burn. No gas after swab run. Made 15 swab runs, recovered 39 bbls. Fluid level staying at 8500'. Rig down swab unit. Rig up pulling unit. Pulled packer loose. GIH, tagged TD 9150.69'. POH with tubing and packer. Prep to drill out 35' of cement for new PBTD of 9185'. EDC \$950; ETCTD \$5630
WATER ANALYSIS: 2-28-85 9094-9114'
Sp. Gravity 1.050 @ 74° Resistivity .16 @ 74°
pH 6.5 Sulfate 500
Iron faint/strong Bicarbonate 732
Hardness 20000 Chloride 44000
Calcium 4400 Sod Chloride 72380
Magnesium 2187 Sodium 19870
Sod & Pot 19870 KCL 0%

3-2-85 GIH with 4 - 3-1/2" drill collars, 1 - 4-3/4" mill tooth bit to drill out 35' of cement (cement top 9150.69'). New PBTD 9185'. Circulate with 2% KCL. POH with tubing and tools. EDC \$3550; ETCTD \$9550

3-3-85 WIH with 4" Steel Casing gun and perforated 9175-78' with 10 .42" holes. GIH with tubing and packer. Spot acid over perforations. Pressure formation for break down, communicated up annulus. Reset packer and pressure test. Packer leaking. POH with packer, rubbers off. Shut in. EDC \$7353; ETCTD \$17903

3-4-85 GIH with tubing, packer, ON/OFF tool and 1.81" profile nipple to acidized perforations 9175-9178' with 1000 gals 7-1/2% Morrow acid and 5 RCN ball sealers. Packer leaking. Pulled 4 stands and reset packer. Test packer, leaking. POH with tubing Uni VI packer. Rn junk basket and gauge ring. Shut down due to high winds. Prep to acidize. EDC \$3150; ETCTD \$21003

3-5-85 GIH with 2-3/8" tubing, Guiberson Uni VI packer (set 9149'), On/Off tool with 1.81" profile nipple. Test packer, OK. Acidized perforations 9175-9178' with 1000 gals 7-1/2% Morrow acid and 5 RCN ball sealers. Formation broke at 3200#, 300# pressure break with ball sealers. Treating pressures: Max 5100#; Avg 4900# @ 3 BPM. ISDP 3200#. Shut down. In 2 minutes, fluid circulating at casing. In 7 minutes, tubing to 0#. Load to recover 60 bbls. Made 33 swab runs, recovered 140 bbls (backside may be communicating). Fluid staying at 4500'. No gas. EDC \$3233; ETCTD \$25233
WATER ANALYSIS
3-4-85 9185-88' Morrow
Sp. Gravity 1.020 pH 5.5
Sodium 3895 Chlorides 34000
Calcium 6400 Sulfate 1200
Iron 306 Carbonate 30000
Total Solids 51375 Bicarbonate 216

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Yates Petroleum Corp. - Flint "GU" #4 (Unit J) 22-18S-26E Eddy Co., NM

3-6-85 Overnight SITP 0#. Fluid level 3000'. Made 35 swab runs, recovered 105 bbls salt water with 4-5' continuous flare burning. Fluid levels as follows:

	TUBING	ANNULUS
2:30 PM	7200'	6175'
6:00 PM	7800'	--
7:00 PM	--	6464'.

Left open overnight. Flare quit burning. Fluid level this AM 6400'. Gas to surface on second swab run. EDC \$1050; ETCTD \$26283

	3-5-85 (AM)	3:00 PM	5:00 PM
Sp. Gravity	1.020	1.025	1.025
Resistivity	0.245	0.295	0.299
pH	6.5	6.5	7.0
Sodium	8629	10032	8549
Calcium	4400	4000	2800
Magnesium	3744	1920	1968
Chloride	32000	32000	24000
Sulfate	1200	1200	1200
Carbonate	20000	12000	11000
Bicarbonate	186	214	171
Total Solids	50159	49336	38688
Iron	346	151	140

3-7-85 Opened overnight with no gas. Fluid level increased from 7800' to 6400'. Second swab run, gas at surface with 4-6' soft flare. Made 24 swab runs, recovered 51 bbls. Fluid level staying 8700'. Fluid level on annulus 6600'. Last 6 swab runs off seating nipple had 300-400' fluid per run (30 min runs). No increase in gas flare. Total load recovered 296 bbls, load to recover 60 bbls. EDC \$1050; ETCTD \$27333

3-8-85 Left open overnight, FTP 0# and no gas. Fluid level 8100'. On 2nd swab run gas to surface with 4-6' flare. Made 9 swab runs, recovered 20 bbls. Last 8 runs off seating nipple had 300-400' fluid. POH with tubing and packer. Prep to run CBL and correlation log. Load recovered 60 bbls, 316 bbls total recovery. EDC \$1245; ETCTD \$28578

	3-7-85	9175-9178' Morrow
Sp. Gravity	1.035	Resistivity .17 @ 74°
pH	7	Chloride 42000
Sodium	12749	Carbonate 32000
Calcium	7600	Bicarbonate 122
Iron	614	Magnesium 3120
Total Solids	67091	

3-9-85 Correlate cased hole and open hole logs. WIH on wireline with _____ gun and perforated 7944-54' with 10 _____ holes. GIH with 2-3/8" tubing, Guiberson Uni IV RBP and Baker Model R packer. Set RBP 8000' and test. Packer leaking at 1000 psi. Moved packer 3 time and washed packer. Packer is still leaking. POH and repair packer. GIH with new packer. EDC \$1050; ETCTD 29628

3-10-85 Acidize perforations 7944-54. Test RBP to 3000#, OK. Spot acid over perforations. Test packer via annulus. Acidize with 1000 gals 15% NEFE acid and 8 RCN ball sealers in 2 drops of 4 each. Formation broke at 2000#. On 1st set of ball sealers 50# increase, 2nd set 50# increase. Treating pressures: Max 6750#; Min 5800#; Avg 6200# @ 3 BPM. ISDP 5400#, 5 min 4300#, 10 min 3940#. Load to recover 86 bbls. Flowed back and swabbed. Made 3 swab runs and flowed 1-1/2 hours. On 4th swab run, gas at surface and 5th run show of oil with gas. Made 18 swab runs, recovered 55 bbls. On last run, 10-15% oil cut. Fluid level 2000' and scattered to seating nipple. Short of load 31 bbls. Shut in to run 36 hour pressure bomb. EDC \$2550; ETCTD \$32108

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Yates Petroleum Corp. - Flint "GU" #4 (Unit J) 22-18S-26E Eddy Co., NM

3-11-85 Shut in for 36 hour pressure test. WATER ANALYSIS:

	3-6-85 9175-78'	3-9-85 7944-54'
Sp. Gravity	1.030	1.060
pH	6.5	7.0
Resistivity	.18 @ 76°	.110 @ 79°
Sodium	23870	17880
Calcium	7200	7600
Magnesium	1920	8736
Chloride	55000	64000
Sulfate	1250	2000
Carbonate	26000	44000
Bicarbonate	152	226
Total Solids	89392	100442
Iron	558	357

3-12-85 Pulled 36 hour pressure bomb at 10:00 AM. Surface pressure 667#, mid perforation pressure 1977#. Set tester on unit. In 6 swab runs, recovered 19 bbls fluid (40% oil). Flowed until 2:15 AM, died. Total recovery 8-3/4 bbls oil, 14 bbls water and approx 60 MCFPD. Tested perforations 7944-7954' Canyon until 2:30 AM. Tubing loaded up. Shut down. Prep to continue testing. WATER ANALYSIS:

	3-11-85	7944-54'
Sp. Gravity	1.050	Resistivity 0.141 @ 68°
pH	6.0	Chloride 47000
Iron	212	Sulfate 1600
Calcium	15200	Carbonate 36000
Magnesium	4992	Bicarbonate 214
Total Solids	69006	

3-13-85 Test unit on well from 7:00 AM to 6:00 PM. Flowed and swabbed 1.9 bbls oil and 19.9 bbls water with continued flare that changed with fluid level. EDC \$6100; ETCTD \$38208

3-14-85 Overnight SITP 500#. POH with tubing and RBP. Set CIBP 8100' with cement cap of 30'. GIH with tubing and Uni VI packer. Test packer (via annulus) to 1000#, no leak off. Prep to acidize. EDC \$4733; ETCTD \$42941

3-15-85 WIH with Uni VI packer, ON/OFF tool with 1.81" profile nipple. Acidized perforations 7941-51' with 12500 gals 15% retarded acid and 7000 gals CO2. Treating pressures: Max 8010#; Min 7200#; Avg 7700# @ 5 BPM (fluid 3.5 BPM, CO2 1.5 BPM). ISDP 6200#, 5 min 5940#, 10 min 5770#, 15 min 5620#. Flowed down. At 4 PM, FTP 400# on 32/64" choke, FTP 0# at 6 PM. Good flow of fluid, some gas to surface. Left open overnight. Recovered 353 bbls. EDC \$20495.62; ETCTD \$63436.62

3-16-18-85 Left open on 32/64" choke overnight. At 7 AM, well flowing 11 MCFPD. Ran swab, initial fluid level 700' and scattered. Made 3 runs per hour. Started 24 hour test at 4:45 PM with hourly swab runs. made 1.76 bbls oil, 36 bbls water and avg 124 MCF. Cum production 13.17 bbls oil and 98 bbls water from Canyon perforations 7944-54'. Shut in at 5:00 PM 3-16-85 for 72 hour Bottom Hole Pressure build-up. Bennett & Cathey test reports on file. EDC \$3500; ETCTD \$70236.62 WATER ANALYSIS:

	3-15-85 2 PM	6 PM	3-16-85 6 AM	12 Noon
Sp. Gravity	1.055	1.055	1.060	1.055
Resistivity	.1 @ 78°	.1 @ 78°	.1 @ 78°	.1 @ 78°
pH	6.5	7	7	7
Iron	150	150	150	150
Sodium	35056	19696	28763	15028
Calcium	15600	16000	25600	32000
Magnesium	5760	3840	720	3360
Chloride	70000	69000	91000	89000
Sulfate	1500	1500	1250	1250
Carbonate	63000	56000	67000	94000
Bicarbonate	396.5	414.8	396.5	347.7
Solids	128312	110451	147729	140986
Oil	trace	12%	trace	trace

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3-19-85	Shut in for pressure buildup.
3-20-85	Shut in for pressure buildup.
3-21-85	Shut in.