

SHUGART DELAWARE
WATERFLOOD

OPERATOR	CURRENT WELL NAME	API #	S-T-R	LOCATION	STATUS	SPUD DATE	COMP. DATE	TD	PBTD	CASING PROGRAM	TOP OF CEMENT	FORMATION	COMPLETION INTERVAL	TREATMENT	IP
ST. MARY	ARCO #1	30-15-25218	24-T18S-R31E	1830' FNL 660' FWL	PROD. OIL	03/12/85	04/01/85	5256'	5235'	13 3/8" 48 #/FT, J-55 SET @ 360' W/ 370 SXS. 4 1/2" 10.5 #/FT, J-55 SET @ 5265' W/ 2300 SXS.	SURF. SURF.	ON-PENR-GBG	3740-4336'	Acidize with 3,150 gal. Frac with 48M gal. & 81M#	50 BOPD 145 BWPD 21 MCFPD
ST. MARY	GERONIMO #1	30-15-24927	24-T18S-R31E	2310' FNL 2310' FEL	PROD. OIL	11/07/84	02/17/85	6417'	4748'	8 5/8" 24 #/FT, J-55 SET @ 350' W/ 370 SXS. 5 1/2" 15.5 #/FT, J-55 SET @ 5367' W/ 900 SXS.	SURF. 2108'	ON-PENR-GBG	4268-4284'	Acidize with 1,500 gal. Frac with 35M gal. & 70M#	105 BOPD 16 BWPD
ST. MARY	GERONIMO #3	30-15-25385	24-T18S-R31E	890' FNL 990' FEL	PROD. OIL	09/01/85	10/05/85	6470'		8 5/8" 24 #/FT, J-55 SET @ 311' W/ 400 SXS. 5 1/2" 15.5 #/FT, J-55 SET @ 6489' W/ 2830 SXS.	SURF. SURF.	DELAWARE	5012-5069' 5221-37' 5302-20'	Acidize with 3,000 gal. Frac with 75M gal. & 131.5M#	166 BOPD 100 BWPD 100 MCFPD
ST. MARY	GERONIMO #4	30-15-25457	24-T18S-R31E	1650' FNL 990' FEL	PROD. OIL	11/30/85	12/20/85	6650'	5321'	13 3/8" 54 #/FT, J-55 SET @ 357' W/ 400 SXS. 8 5/8" 24 #/FT, J-55 SET @ 2,247' W/ 830 SXS. 5 1/2" 15.5 #/FT, J-55 SET @ 5365' W/ 840 SXS.	SURF. SURF. 2286'	DELAWARE	5016-5074'	Acidize with 1,000 gal. Frac with 32M gal. & 62M#	135 BOPD 345 BWPD 100 MCFPD
ST. MARY	GERONIMO #5	30-15-25546	24-T18S-R31E	765' FNL 1980' FEL	PROD. OIL	02/16/86	03/18/86	10,200'	5250'	13 3/8" 54 #/FT, J-55 SET @ 372' W/ 385 SXS. 8 5/8" 32 & 24 #/FT, J-55 SET @ 5350' W/ 2050 SXS.	SURF. SURF.	DELAWARE	5013-5088' 5114-21'	Acidize with 2,000 gal. Frac with 60M gal. & 110M#	70 BOPD 105 BWPD 75 MCFPD
ST. MARY	GERONIMO #8	30-15-25652	24-T18S-R31E	2310' FSL 990' FEL	PROD. OIL	09/08/86	10/02/86	5550'	5441'	8 5/8" 24 #/FT, J-55 SET @ 337' W/ 250 SXS. 5 1/2" 15.5 #/FT, J-55 SET @ 5497' W/ 910 SXS.	SURF. SURF.	DELAWARE	5042-5094'	Acidize with 1,000 gal. Frac with 22M gal. & 39M#	99 BOPD 68 BWPD 150 MCFPD
ST. MARY	GERONIMO #9	30-15-25723	24-T18S-R31E	1730' FNL 1650' FEL	PROD. OIL	12/01/86	02/02/87	5400'	5360'	8 5/8" 24 #/FT, J-55 SET @ 345' W/ 200 SXS. 5 1/2" 15.5 #/FT, J-55 SET @ 5400' W/ 1300 SXS.	SURF. SURF.	DELAWARE	5022-72', 5136-66, 5258-73'	Acidize with 2,750 gal. Frac with 82M gal. & 141.1M#	146 BOPD 70 BWPD 183 MCFPD
ST. MARY	GERONIMO #10	30-15-25735	24-T18S-R31E	2310' FSL 1650' FEL	PROD. OIL	03/02/87	03/23/87	5550'	5477'	8 5/8" 24 #/FT, J-55 SET @ 350' W/ 230 SXS. 5 1/2" 15.5 #/FT, J-55 SET @ 5496' W/ 1300 SXS.	SURF. SURF.	DELAWARE	5033-5079'	Acidize with 1,000 gal. Frac with 21M gal. & 43M#	116 BOPD 65 BWPD 125 MCFPD
ST. MARY	GERONIMO #11	30-15-25803	24-T18S-R31E	990' FSL 330' FEL	T & A OIL	09/03/87	09/30/87	5550'	5489'	8 5/8" 24 #/FT, J-55 SET @ 364' W/ 230 SXS. 5 1/2" 15.5 #/FT, J-55 SET @ 5489' W/ 1330 SXS.	SURF. SURF.	DELAWARE	4636-4651'	Acidize with 1,000 gal. Frac with 32M gal. & 64M#	68 BOPD 115 BWPD 30 MCFPD
ST. MARY	GERONIMO #12	30-15-26022	24-T18S-R31E	990' FNL 1650' FEL	PROD. OIL	12/21/88	02/03/89	5600'	5400'	8 5/8" 24 #/FT, J-55 SET @ 372' W/ 240 SXS. 5 1/2" 17 & 15.5 #/FT, J-55 SET @ 5622' W/ 1170 SXS.	SURF. SURF.	DELAWARE	5255-5270', 5311-29', 5135-5156', 5021-69'	Acidize with 3,500 gal. Frac with 98.75M gal. & 215.3M#	88 BOPD 195 BWPD 75 MCFPD
K. O BUTLER	GHANDI #1	30-15-26243	24-T18S-R31E	990' FNL 330' FWL	PROD. OIL	12/15/89	05/23/89	10,000'	9180'	13 3/8" 54 #/FT, J-55 SET @ 467' W/ 500 SXS. 8 5/8" 24 #/FT, J-55 SET @ 2,419' W/ 1000 SXS. 5 1/2" 15.5 #/FT, J-55 SET @ 10000' W/ 2030 SXS.	SURF. SURF. SURF.	BONE SPRING	7871-8141', 8264-340, 8452-8995, 9224-350'	Acidize w/ 25,000 gal. Frac w/ 395 Mgal. & 791.5 M#	71 BOPD 139 BWPD 49 MCFPD
HEYCO	SO. TAYLOR 13 #1	30-15-25594	13-T18S-R31E	330' FSL 990' FEL	PROD. OIL	07/24/86	09/25/86	5410'	5083'	8 5/8" 24 #/FT, J-55 SET @ 352' W/ 250 SXS. 5 1/2" 15.5 #/FT, J-55 SET @ 5410' W/ 2325 SXS.	SURF. SURF.	DELAWARE	5063, 5180-220'	Acidize w/ 6000 gal. Frac w/ 50 Mgal. & 102 M#	120 BOPD 105 MCFPD
HEYCO	SO. TAYLOR 13 #2	30-15-25847	13-T18S-R31E	330' FSL 330' FEL	PROD. OIL	12/30/87	03/09/88	5448'	5410'	8 5/8" 24 #/FT, J-55 SET @ 350' W/ 230 SXS. 5 1/2" 15.5 #/FT, J-55 SET @ 5448' W/ 1350 SXS.	SURF. SURF.	DELAWARE	4312-410'	Acidize w/ 1200 gal. Frac w/ 40 Mgal. & 60 M#	181 BOPD 0 BWPD 73 MCFPD
HEYCO	SO. TAYLOR 13 #3	30-15-25741	13-T18S-R31E	430' FSL 1650' FEL	PROD. OIL	07/22/88	08/01/88	5450'	4781'	8 5/8" 24 #/FT, J-55 SET @ 366' W/ 230 SXS. 5 1/2" 15.5 #/FT, J-55 SET @ 5450' W/ 1950 SXS.	SURF. SURF.	DELAWARE	4848-70'	Acidize w/ 2100 gal. Frac w/ 20 Mgal & 42.5 M#	39 BWPD NR MCFPD
HEYCO	SO. TAYLOR 13 #4	30-15-26150	13-T18S-R31E	1650' FSL 660' FEL	PROD. OIL	07/19/89	08/29/89	5550'	4650'	9 5/8" 40#/FT, J-55 SET @ 350' W/ 400 SXS. 5 1/2" 15.5 #/FT, J-55 SET @ 4895' W/ 1775 SXS.	SURF. SURF.	ON-PENR-GBG	4330-4428'	Acidize w/ 1200 gal. Frac w/ 40 Mgal & 63 M#	34 BOPD 150 BWPD 39 MCFPD
WESTALL	BUFFALO #1	30-25-29985	18-T18S-R32E	1650' FSL 330' FWL	T & A OIL	09/09/87	11/24/87	6519'	6469'	8 5/8" 24 #/FT, J-55 SET @ 950' W/ 570 SXS. 5 1/2" 15.5 #/FT, J-55 SET @ 6619' W/ 2775 SXS.	SURF. SURF.	DELAWARE	6276-329 4795-820'	Acidize w/ 2500 gal. Frac w/ 44 Mgal & 70 M#	33 BOPD 81 BWPD NR MCFPD
WESTALL	BUFFALO #2	30-25-30013	18-T18S-R32E	330' FSL 1650' FWL	T & A OIL	10/02/87	12/09/87	6550'	5064'	8 5/8" 24 #/FT, J-55 SET @ 900' W/ 570 SXS. 5 1/2" 15.5 #/FT, J-55 SET @ 5110' W/ 2025 SXS.	SURF. SURF.	ON-PENR-GBG	4826-958'	NOT REPORTED	10 BOPD 11 BWPD NR MCFPD
ST. MARY	CONOCO #1	30-25-29694	18-T18S-R32E	330' FSL 330' FWL	PROD. OIL	06/21/86	07/15/86	5550'	5457'	8 5/8" 24 #/FT, J-55 SET @ 362' W/ 250 SXS. 5 1/2" 15.5 #/FT, J-55 SET @ 5457' W/ 600 SXS.	SURF. SURF.	DELAWARE	5190-221' 5267-295'	Acidize with 2,500 gal. Frac with 60M gal. & 116M#	141 BOPD 21 BWPD 150 MCFPD
ST. MARY	JADE #1	30-25-29939	19-T18S-R32E	1650' FNL 1650' FWL	PROD. OIL	06/20/87	07/13/87	5550'	5488'	8 5/8" 24 #/FT, J-55 SET @ 372' W/ 230 SXS. 5 1/2" 15.5 #/FT, J-55 SET @ 5500' W/ 1160 SXS.	SURF. SURF.	DELAWARE	5274-5289' 5166-90'	Acidize with 2,000 gal. Frac with 73M gal. & 111.28M#	142 BOPD 101 BWPD 150 MCFPD
ST. MARY	INCA #1	30-25-29887	19-T18S-R32E	760' FNL 440' FWL	PROD. OIL	04/10/87	05/04/87	5550'	5450'	8 5/8" 24 #/FT, J-55 SET @ 350' W/ 200 SXS. 5 1/2" 15.5 #/FT, J-55 SET @ 5500' W/ 1250 SXS.	SURF. SURF.	DELAWARE	5292-307' 5220-67'	Acidize with 2,000 gal. Frac with 75M gal. & 133.8M#	171 BOPD 148 BWPD 200 MCFPD
ST. MARY	INCA #2	30-25-29940	19-T18S-R32E	1700' FNL 330' FWL	PROD. OIL	06/08/87	08/28/87	5550'	5460'	8 5/8" 24 #/FT, J-55 SET @ 372' W/ 200 SXS. 5 1/2" 15.5 #/FT, J-55 SET @ 5460' W/ 1170 SXS.	SURF. SURF.	DELAWARE	5259-74' 5158-73'	Acidize with 1,000 gal. Frac with 23M gal. & 46M#	178 BOPD 201 BWPD 190 MCFPD
ST. MARY	INCA #3	30-25-29978	19-T18S-R32E	660' FNL 1650' FWL	PROD. OIL	07/12/87	08/06/87	5550'	5255'	8 5/8" 24 #/FT, J-55 SET @ 374' W/ 230 SXS. 5 1/2" 15.5 #/FT, J-55 SET @ 5500' W/ 1360 SXS.	SURF. SURF.	DELAWARE	5188-5200' 5293-307'	Acidize with 1,500 gal. Frac with 38M gal. & 78M#	134 BOPD 146 BWPD 90 MCFPD
ST. MARY	CONOCO #3	30-25-30187	19-T18S-R32E	2310' FSL 660' FWL	PROD. OIL	12/27/87	02/12/88	5650'	5596'	8 5/8" 24 #/FT, J-55 SET @ 374' W/ 230 SXS. 5 1/2" 15.5 #/FT, J-55 SET @ 5636' W/ 1425 SXS.	SURF. SURF.	DELAWARE	5054-215'	Acidize with 2,000 gal. Frac with 47M gal. & 98M#	98 BOPD 154 BWPD 55 MCFPD
ST. MARY	MOHAWK #1	30-25-30111	19-T18S-R32E	2310' FSL 1650' FWL	PROD. OIL	10/24/87	11/28/87	6550'	6510'	8 5/8" 24 #/FT, J-55 SET @ 351' W/ 230 SXS. 5 1/2" 15.5 #/FT, J-55 SET @ 6550' W/ 1635 SXS.	SURF. SURF.	DELAWARE	5048-72' 5211-26'	Acidize with 2,000 gal. Frac with 31M gal. & 59.4M#	60 BOPD 89 BWPD 49 MCFPD

THE FOLLOWING WELLS ARE WITHIN THE AREA OF REVIEW BUT DID NOT PENETRATE THE DELAWARE.

OPERATOR	CURRENT WELL NAME	API #	S-T-R	LOCATION	STATUS	SPUD DATE	COMP. DATE	TD	PBTD
ST. MARY	ARCO #2	30-15-25624	24-T18S-R31E	950' FNL 2310' FWL	PROD	6/2/86	6/21/86	4500'	4487'
ST. MARY	GERONIMO #2	30-15-25244	24-T18S-R31E	950' FNL 2310' FEL	INJ.	4/3/86	4/26/85	4702'	4691'
ST. MARY	GERONIMO #6	30-15-25597	24-T18S-R31E	790' FNL 940' FEL	PROD	4/10/86	4/26/86	4450'	4407'
ST. MARY	GERONIMO #7	30-15-25598	24-T18S-R31E	1750' FNL 990' FEL	INJ	4/21/86	5/6/86	4500'	4489'
ST. MARY	JADE #2	30-25-30038	19-T18S-R32E	1650' FNL 1750' FWL	PROD	12/15/87	1/25/88	4525'	4320'
ST. MARY	INCA #4	30-25-30039	19-T18S-R32E	760' FNL 430' FWL	INJ	1/7/88	2/5/88	4500'	4244'
THUNDERBOL PETROLEUM	ORION #1	30-25-33140	19-T18S-R32E	2310' FSL 500' FWL	PROD	11/12/95	2/2/96	4500'	4454'
WESTALL	KEOHANE FED #2	30-15-25441	24-T18S-R31E	2310' FSL 2200' FEL	PROD	10/18/85	12/11/85	4500'	
WESTALL	KEOHANE FED #3	30-15-25814	24-T18S-R31E	2200' FSL 990' FEL	PROD	10/30/87	11/25/87	4500'	
ST. MARY	BLACKHAWK #1	30-15-25235	24-T18S-R31E	2310' FSL 1650' FWL	SHUT IN PROD	3/24/85	4/18/85	4527'	4485'
ST. MARY	BLACKHAWK #2	30-15-25360	24-T18S-R31E	2310 FNL 1980' FWL	SHUT IN PROD	8/4/85	9/5/85	4500'	4490'
ST. MARY	BLACKHAWK #7	30-15-26500	24-T18S-R31E	2630' FNL 2310' FWL	INJ	11/23/90	11/23/90	4500'	4455'
ST. MARY	CONOCO #2	30-25-29803	18-T18S-R32E	400' FSL 400' FWL	PROD	12/13/86	1/12/87	4500'	4487'
ST. MARY	KEOHANE FED #1	30-15-NA	24-T18S-R31E	330' FNL 2260' FEL	P & A	3/12/61	5/3/61	4232'	