

(Name) J. K. Ripley

SUBSCRIBED AND SWORN TO before me this 2nd day of January, 1997.



Maggie M. Bermea

Notary Public for State of Texas

My Commission expires: 7/30/97

FOR OIL CONSERVATION DIVISION USE ONLY:

VIII. CERTIFICATION OF APPROVAL:

This Application for Qualification of Well Workover Project is hereby approved and the above referenced Well is designated as a Well Workover Project pursuant to the "Natural Gas and Crude Oil Production Incentive Act" (Laws 1995, Chapter 15, Sections 1 through 8). The Oil Conservation Division hereby verifies the Production Projection for the Well Workover Project attached to this application. By copy of this Application and Certification of Approval, the Division notifies the Secretary of the Taxation and Revenue Department of this Approval and certifies that this Well Workover Project has been completed as of 2-8, 1998.

Paul J. Ruff
District Supervisor, District 4 Geologist
Oil Conservation Division

Date: 1/22/97

IX. DATE OF NOTIFICATION TO THE SECRETARY OF THE TAXATION AND REVENUE DEPARTMENT.

DATE: _____



EMSU #409
Eunice Monument Grayburg / San Andres Field
Lea County, New Mexico
Nov. 15, 1995

Workover Procedure - Acidize Stimulate

1. MIRU PU. POH w/ rods & pump. Install BOP. GIH, tag for fill & POH w/ prod. tbg.
2. If significant fill is indicated on TD check (ie., above 4070 +/-), RU Rev Unit. GIH w/ bit, DC's, etc. on tbg. C/O to +/- 4111'. (**Catch samples and analyze for composition**) RD Rev Unit. POH w/ tbg, DC's & bit.
3. GIH w/ seating nipple, trtg pkr & tubing unloader on tbg. Set pkr @ 3812' +/- . Drop standing valve and seat in SN. RU Acid Trtg Co. (NOWSCO or Knox). Pick up on tubing to set tbg unloader in circ. position. Pickle tubing with 500 gals 15% NEFE acid. Flush to bottom of tbg w/ water. Pump pickle acid at approximately 1/2 BPM. Load backside and circulate pickle acid out of tbg (at 1/2 BPM when catch pressure on backside). **NOTE: CATCH SAMPLES OF PICKLE FLUID AND HAVE ANALYZED FOR IRON CONTENT AND TOTAL SOLIDS CONTENT +/- 5 TIMES (or more as appropriate) THROUGHOUT BACK CIRCULATION.** Repickle tubing if iron counts are above +/- 2000 ppm on "last in" acid. Slack off on tbg to set tbg unloader in closed position. Fish standing valve. Acidize OH (3862' - 4111') w/ 4500 gal Viscosified Mutual Solvent (20% by volume) and Acid* (80% by volume) in 4 stages at rate of 2-3 BPM and max. trtg press of 1250 psig STP, while monitoring backside, as follows:
 - A. Pump 1125 gal Viscosified Mutual Solv. & Acid*.
 - B. Pump 1125 gal Viscosified Mutual Solv. & Acid *, dropping 400# of 100 mesh Salt & 100# Graded Rock Salt (i.e., 80 / 20 mixture 100 mesh / GRS) in leading edge of acid stage.
 - C. Repeat step B two times. Vary block size depending on response encountered in previous salt block.
 - D. Flush to top perf / open hole with water.
4. Shut well in a minimum of 2 hours. RD Trtg Co.
5. Flow/swab back acid residue until well cleans up. POH w/ pkr & tbg.
- ~~6. GIH w/ prod tbg. ND BOP. GIH w/ pump & rods. Hang well on. RD PU.~~
7. Test well & report results to Midland office.

* Newsco's 20% mutual solvent / 80% acid system contains the following:

" Newsco's Viscosified Pentol 200"

200 gal / 1000 gal Pentol

800 gal / 1000 15% HCL

10 gal / 1000 IC3 - Glacial Acetic

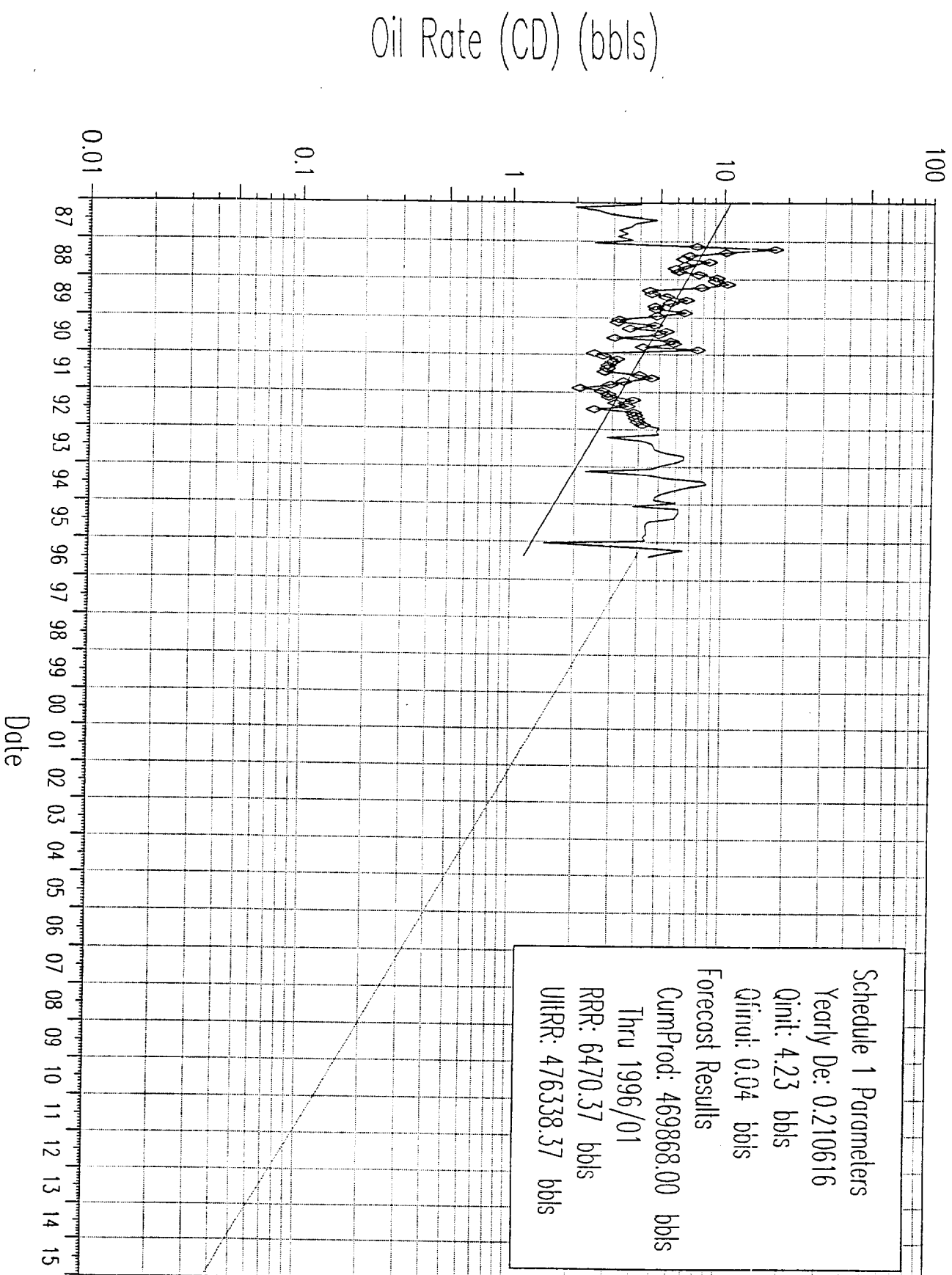
1 gal / 1000 AI180 - Inhibitor

4 gal / 1000 (3 - 5 gal / 1000 as appropriate to achieve 30 cp visc.) - E30 - surfactant (emulsifier)

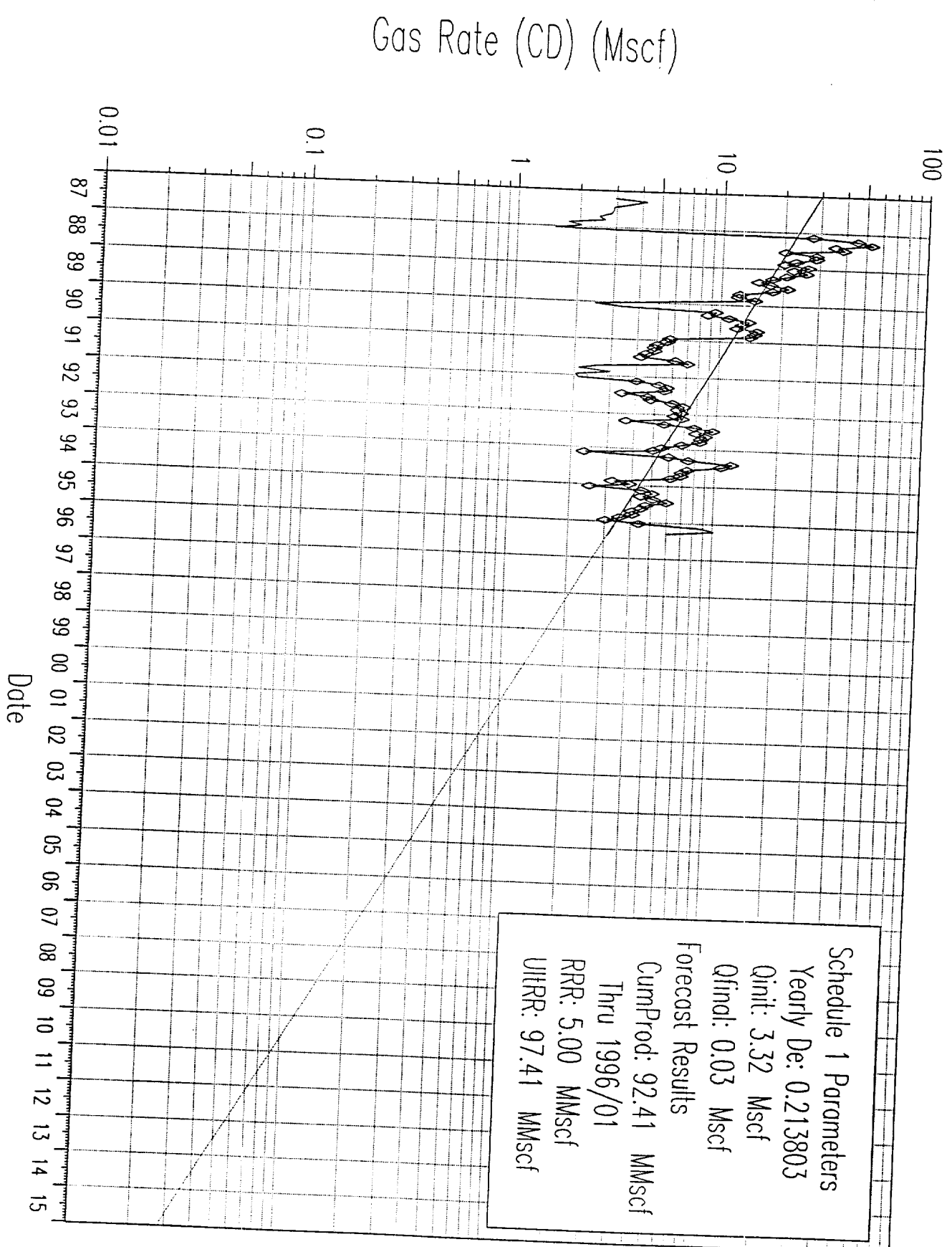
* Knox's viscosified acid / mutual solvent system is trade named "Paraffin Master". System contains similar components as above, but different trade names. Knox will create custom system as appropriate.

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DATE	OIL VOLUME PRODUCED bbls	FORECASTED OIL VOLUME bbls	GAS VOLUME PRODUCED Mscf	FORECASTED GAS VOLUME Mscf
9201	90	0.00	65	0.00
9202	85	0.00	119	0.00
9203	118	0.00	163	0.00
9204	95	0.00	172	0.00
9205	111	0.00	174	0.00
9206	75	0.00	105	0.00
9207	119	0.00	145	0.00
9208	121	0.00	150	0.00
9209	119	0.00	185	0.00
9210	125	0.00	216	0.00
9211	127	0.00	197	0.00
9212	155	0.00	212	0.00
9301	151	0.00	198	0.00
9302	138	0.00	193	0.00
9303	88	0.00	115	0.00
9304	125	0.00	171	0.00
9305	144	0.00	246	0.00
9306	141	0.00	293	0.00
9307	148	0.00	253	0.00
9308	168	0.00	280	0.00
9309	196	0.00	259	0.00
9310	203	0.00	264	0.00
9311	180	0.00	210	0.00
9312	159	0.00	173	0.00
9401	143	0.00	157	0.00
9402	63	0.00	66	0.00
9403	140	0.00	188	0.00
9404	161	0.00	227	0.00
9405	253	0.00	378	0.00
9406	253	0.00	328	0.00
9407	210	0.00	232	0.00
9408	183	0.00	219	0.00
9409	154	0.00	209	0.00
9410	149	0.00	193	0.00
9411	143	0.00	98	0.00
9412	187	0.00	122	0.00
9501	118	0.00	79	0.00
9502	174	0.00	127	0.00
9503	193	0.00	158	0.00
9504	183	0.00	136	0.00
9505	184	0.00	161	0.00
9506	135	0.00	180	0.00
9507	135	0.00	148	0.00
9508	135	0.00	141	0.00
9509	132	0.00	124	0.00
9510	136	0.00	128	0.00
9511	127	0.00	108	0.00
9512	135	0.00	95	0.00
9601	45	0.00	138	0.00
9602	113	121.47	259	95.32

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DATE	OIL VOLUME PRODUCED bbls	FORECASTED OIL VOLUME bbls	GAS VOLUME PRODUCED Mscf	FORECASTED GAS VOLUME Mscf
9603	203	127.31	313	99.87
9604	158	120.80	179	94.73
9605	141	122.39	0	95.95
9606	0	116.13	0	91.01
9607	0	117.66	0	92.18
9608	0	115.37	0	90.35
9609	0	109.46	0	85.70
9610	0	110.91	0	86.80
9611	0	105.23	0	82.33
9612	0	106.62	0	83.39
9701	0	104.54	0	81.73
9702	0	92.58	0	72.36
9703	0	100.50	0	78.52
9704	0	95.36	0	74.48
9705	0	96.61	0	75.43
9706	0	91.67	0	71.55
9707	0	92.88	0	72.47
9708	0	91.07	0	71.03
9709	0	86.41	0	67.38
9710	0	87.55	0	68.24
9711	0	83.07	0	64.73
9712	0	84.16	0	65.56
9801	0	82.52	0	64.26
9802	0	73.08	0	56.89
9803	0	79.33	0	61.73
9804	0	75.27	0	58.56
9805	0	76.27	0	59.31
9806	0	72.37	0	56.25
9807	0	73.32	0	56.98
9808	0	71.89	0	55.84
9809	0	68.21	0	52.97
9810	0	69.11	0	53.65
9811	0	65.57	0	50.89
9812	0	66.44	0	51.54
9901	0	65.14	0	50.52
9902	0	57.69	0	44.72
9903	0	62.62	0	48.53
9904	0	59.42	0	46.04
9905	0	60.20	0	46.63
9906	0	57.12	0	44.23
9907	0	57.88	0	44.79
9908	0	56.75	0	43.91
9909	0	53.84	0	41.65
9910	0	54.55	0	42.18
9911	0	51.76	0	40.01
9912	0	52.44	0	40.52
10001 → (2000/01)	0	51.42	0	39.72
10002	0	47.16	0	36.42
10003	0	49.43	0	38.16
10004	0	46.91	0	36.19

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DATE	OIL VOLUME PRODUCED bbls	FORECASTED OIL VOLUME bbls	GAS VOLUME PRODUCED Mscf	FORECASTED GAS VOLUME Mscf
10005	0	47.52	0	36.66
10006	0	45.09	0	34.77
10007	0	45.69	0	35.22
10008	0	44.79	0	34.52
10009	0	42.50	0	32.74
10010	0	43.06	0	33.16
10011	0	40.86	0	31.45
10012	0	41.40	0	31.86
10101	0	40.59	0	31.23
10102	0	35.95	0	27.64
10103	0	39.02	0	30.00
10104	0	37.03	0	28.46
10105	0	37.51	0	28.82
10106	0	35.60	0	27.34
10107	0	36.06	0	27.69
10108	0	35.36	0	27.14
10109	0	33.55	0	25.74
10110	0	33.99	0	26.07
10111	0	32.25	0	24.73
10112	0	32.68	0	25.05
10201	0	32.04	0	24.55
10202	0	28.38	0	21.73
10203	0	30.80	0	23.59
10204	0	29.23	0	22.37
10205	0	29.61	0	22.66
10206	0	28.10	0	21.49
10207	0	28.47	0	21.77
10208	0	27.91	0	21.34
10209	0	26.49	0	20.24
10210	0	26.83	0	20.50
10211	0	25.46	0	19.44
10212	0	25.80	0	19.69
10301	0	25.29	0	19.30
10302	0	22.40	0	17.09
10303	0	24.32	0	18.54
10304	0	23.07	0	17.59
10305	0	23.38	0	17.81
10306	0	22.18	0	16.90
10307	0	22.47	0	17.11
10308	0	22.03	0	16.77
10309	0	20.91	0	15.91
10310	0	21.18	0	16.12
10311	0	20.10	0	15.29
10312	0	20.36	0	15.48
10401	0	19.97	0	15.17
10402	0	18.31	0	13.91
10403	0	19.19	0	14.58
10404	0	18.21	0	13.83
10405	0	18.45	0	14.01
10406	0	17.51	0	13.28

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DATE	OIL VOLUME PRODUCED bbls	FORECASTED OIL VOLUME bbls	GAS VOLUME PRODUCED Mscf	FORECASTED GAS VOLUME Mscf
10407	0	17.74	0	13.45
10408	0	17.39	0	13.19
10409	0	16.50	0	12.51
10410	0	16.72	0	12.67
10411	0	15.87	0	12.02
10412	0	16.07	0	12.17
10501	0	15.76	0	11.93
10502	0	13.96	0	10.56
10503	0	15.15	0	11.46
10504	0	14.38	0	10.87
10505	0	14.57	0	11.01
10506	0	13.82	0	10.44
10507	0	14.00	0	10.58
10508	0	13.73	0	10.37
10509	0	13.03	0	9.83
10510	0	13.20	0	9.96
10511	0	12.52	0	9.45
10512	0	12.69	0	9.57
10601	0	12.44	0	9.38
10602	0	11.02	0	8.30
10603	0	11.96	0	9.01
10604	0	11.35	0	8.55
10605	0	11.50	0	8.66
10606	0	10.91	0	8.21
10607	0	11.05	0	8.32
10608	0	10.84	0	8.15
10609	0	10.28	0	7.73
10610	0	10.42	0	7.83
10611	0	9.89	0	7.43
10612	0	10.02	0	7.52
10701	0	9.82	0	7.37
10702	0	8.70	0	6.53
10703	0	9.44	0	7.08
10704	0	8.96	0	6.72
10705	0	9.08	0	6.81
10706	0	8.61	0	6.46
10707	0	8.73	0	6.54
10708	0	8.56	0	6.41
10709	0	8.12	0	6.08
10710	0	8.22	0	6.16
10711	0	7.80	0	5.84
10712	0	7.91	0	5.91
10801	0	7.75	0	5.80
10802	0	7.11	0	5.32
10803	0	7.45	0	5.57
10804	0	7.07	0	5.28
10805	0	7.16	0	5.35
10806	0	6.80	0	5.08
10807	0	6.89	0	5.14
10808	0	6.75	0	5.04

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DATE	OIL VOLUME PRODUCED bbls	FORECASTED OIL VOLUME bbls	GAS VOLUME PRODUCED Mscf	FORECASTED GAS VOLUME Mscf
10809	0	6.41	0	4.78
10810	0	6.49	0	4.84
10811	0	6.16	0	4.59
10812	0	6.24	0	4.65
10901	0	6.12	0	4.56
10902	0	5.42	0	4.04
10903	0	5.88	0	4.38
10904	0	5.58	0	4.15
10905	0	5.66	0	4.21
10906	0	5.37	0	3.99
10907	0	5.44	0	4.04
10908	0	5.33	0	3.96
10909	0	5.06	0	3.76
10910	0	5.13	0	3.81
10911	0	4.86	0	3.61
10912	0	4.93	0	3.66
11001	0	4.83	0	3.58
11002	0	4.28	0	3.17
11003	0	4.64	0	3.44
11004	0	4.41	0	3.27
11005	0	4.46	0	3.31
11006	0	4.24	0	3.14
11007	0	4.29	0	3.18
11008	0	4.21	0	3.11
11009	0	3.99	0	2.95
11010	0	4.05	0	2.99
11011	0	3.84	0	2.84
11012	0	3.89	0	2.87
11101	0	3.81	0	2.82
11102	0	3.38	0	2.49
11103	0	3.67	0	2.71
11104	0	3.48	0	2.57
11105	0	3.52	0	2.60
11106	0	3.34	0	2.47
11107	0	3.39	0	2.50
11108	0	3.32	0	2.45
11109	0	3.15	0	2.32
11110	0	3.19	0	2.35
11111	0	3.03	0	2.23
11112	0	3.07	0	2.26
11201	0	3.01	0	2.21
11202	0	2.76	0	2.03
11203	0	2.89	0	2.13
11204	0	2.75	0	2.02
11205	0	2.78	0	2.04
11206	0	2.64	0	1.94
11207	0	2.67	0	1.96
11208	0	2.62	0	1.92
11209	0	2.49	0	1.83
11210	0	2.52	0	1.85

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DATE	OIL VOLUME PRODUCED bbls	FORECASTED OIL VOLUME bbls	GAS VOLUME PRODUCED Mscf	FORECASTED GAS VOLUME Mscf
11211	0	2.39	0	1.75
11212	0	2.42	0	1.78
11301	0	2.38	0	1.74
11302	0	2.10	0	1.54
11303	0	2.28	0	1.67
11304	0	2.17	0	1.59
11305	0	2.20	0	1.61
11306	0	2.08	0	1.52
11307	0	2.11	0	1.54
11308	0	2.07	0	1.51
11309	0	1.96	0	1.44
11310	0	1.99	0	1.45
11311	0	1.89	0	1.38
11312	0	1.91	0	1.40
11401	0	1.88	0	1.37
11402	0	1.66	0	1.21
11403	0	1.80	0	1.32
11404	0	1.71	0	1.25
11405	0	1.73	0	1.26
11406	0	1.64	0	1.20
11407	0	1.67	0	1.21
11408	0	1.63	0	1.19
11409	0	1.55	0	1.13
11410	0	1.57	0	1.14
11411	0	1.49	0	1.08
11412	0	1.51	0	1.10
11501	0	1.48	0	1.08
11502	0	1.31	0	0.95
11503	0	1.42	0	1.03
11504	0	1.35	0	0.98
11505	0	1.37	0	0.99
11506	0	1.30	0	0.94
11507	0	1.32	0	0.95
11508	0	1.29	0	0.94
11509	0	1.22	0	0.89
11510	0	1.24	0	0.90
11511	0	1.18	0	0.85
11512	0	1.19	0	0.86